

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Pace on 10/18/2011.

The application has been amended as follows:

Please cancel claim 57.

In claim 58, line 2 of the claim, please delete "further comprises a coating (outer shell)" and replace with --further comprises a coating--.

Examiner's Statement of Reasons for Allowance

The following is an examiner's statement of reasons for allowance: the closest prior art is considered to be Yang *et al.* (*Applied Phys. Letters*, 2003, 82(12), p. 1965-1967), which teaches CdS:Mn/ZnS core shell quantum dots and luminescence properties, but does not teach their use as contrast agents. Nie *et al.* (US 2005/0265922) is also relevant to the invention for teaching PEG-PL-DTPA-Gd polymer coated quantum dots as contrast agents in Example 12, but uses PEG-PL to link

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gadolinium to quantum dot, rather than silica, as claimed. The prior art does not teach silica/gadolinium coating on quantum dot, particularly on CdS:Mn/ZnS core shell quantum dots for use as multifunctional contrast agents. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leah Schlientz whose telephone number is (571)272-9928. The examiner can normally be reached on Monday-Wednesday 9 AM-5 PM and telework Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LHS/

/Michael G. Hartley/
Supervisory Patent Examiner, Art Unit 1618